Safety data sheet
according to 1907/2006/EC, Article 31

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

· ***1.1 Product identifier***

· ***Trade name:*** **PTFE-Spray / 400 ml**

· ***1.2 Relevant identified uses of the substance or mixture and uses advised against***
No further relevant information available.
· ***Application of the substance / the mixture*** Release agent

· ***1.3 Details of the supplier of the safety data sheet***
· ***Manufacturer/Supplier:***
Spengler Fluorkunststoffe GmbH & Co. KG
Buchenring 20
D-42281 Wuppertal
Tel.: +49 202 8702790
Fax: +49 202 8702786
Website: www.sp-ptfe.de
e-Mail: info@sp-ptfe.de

· ***Informing department:***
Phone: +49 202 8702790
Fax.: +49 202 8702786

· ***1.4 Emergency telephone number:*** Phone +49 202 8702790

SECTION 2: Hazards identification

· ***2.1 Classification of the substance or mixture***
· ***Classification according to Regulation (EC) No 1272/2008***


GHS02 flame

Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.


GHS09 environment

Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.


GHS07

Skin Irrit. 2	H315	Causes skin irritation.
STOT SE 3	H336	May cause drowsiness or dizziness.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.

· ***2.2 Label elements***
· ***Labelling according to Regulation (EC) No 1272/2008***
The product is classified and labelled according to the CLP regulation.

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· ***Hazard pictograms***

GHS02 GHS07 GHS09

· ***Signal word*** Danger

· ***Hazard-determining components of labelling:***
Naphtha (petroleum), hydrotreated light
Naphtha (petroleum), hydrodesulfurized light dearomatized

· ***Hazard statements***
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

· ***Precautionary statements***
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P261 Avoid breathing spray.
P280 Wear protective gloves / eye protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents/container in accordance with local / regional / national / international regulations.

· ***2.3 Other hazards***
· ***Results of PBT and vPvB assessment***
· ***PBT:*** Not applicable.
· ***vPvB:*** Not applicable.

*

SECTION 3: Composition/information on ingredients

· ***3.2 Chemical characterisation: Mixtures***
· ***Description:*** Mixture of the substances listed below including additives not requiring identification.

· ***Dangerous components:***

CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-X	butane Flam. Gas 1, H220; Press. Gas (Comp.), H280	25 - 50%
CAS: 64742-49-0 EINECS: 265-151-9 Reg.nr.: 01-2119475133-43-X	Naphtha (petroleum), hydrotreated light Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	25 - 50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-X	propane Flam. Gas 1, H220; Press. Gas (Comp.), H280	10 - 25%
CAS: 92045-53-9 EINECS: 295-434-2	Naphtha (petroleum), hydrodesulfurized light dearomatized Asp. Tox. 1, H304	2.5 - 10%

· ***Additional information*** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

· ***4.1 Description of first aid measures***
· ***After inhalation*** Supply fresh air; consult doctor in case of symptoms.
· ***After skin contact***
Wash with water and soap.
If skin irritation continues, consult a doctor.
· ***After eye contact***
Rinse opened eye for several minutes under running water.
In case of permanent aches and pains please go and see the doctor.
· ***After swallowing***
Swallowing is not considered to be a possible way of exposure.
In case of persistent symptoms consult doctor.
· ***4.2 Most important symptoms and effects, both acute and delayed***
No further relevant information available.
· ***4.3 Indication of any immediate medical attention and special treatment needed***
No further relevant information available.

SECTION 5: Firefighting measures

· ***5.1 Extinguishing media***
· ***Suitable extinguishing agents***
CO2, extinguishing powder or water spray. Fight larger fires with water spray.
· ***For safety reasons unsuitable extinguishing agents*** Water with a full water jet.
· ***5.2 Special hazards arising from the substance or mixture***
Inhalation of combustion gases may cause serious health hazards.
Formation of poisonous gases during heating or in fires.
Can be released in case of fire:
Hydrogen fluoride (HF)
Fluorohydrocarbons
· ***5.3 Advice for firefighters***
· ***Protective equipment:*** Wear self-contained breathing apparatus.
· ***Additional information***
Cool endangered containers with water spray.
Remove goods in stock from incendiary zone, if possible.

SECTION 6: Accidental release measures

· ***6.1 Personal precautions, protective equipment and emergency procedures***
Keep away from sources of ignition and care for sufficient ventilation due to the content of organic solvents.
Evacuate personnel to safe area.
· ***6.2 Environmental precautions:***
Do not allow product to reach sewage system or water bodies.
Inform respective authorities in case product reaches water or sewage system.
· ***6.3 Methods and material for containment and cleaning up:***
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
· ***6.4 Reference to other sections***
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

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SECTION 7: Handling and storage

· ***7.1 Precautions for safe handling*** Ensure good ventilation/exhaustion at the workplace.
· ***Information about protection against explosions and fires:***
Keep ignition sources away - Do not smoke.
Do not spray on flames or red-hot objects.

· ***7.2 Conditions for safe storage, including any incompatibilities***
· ***Storage***
· ***Requirements to be met by storerooms and containers:***
Store in cool location.
Observe official regulations on storing packagings with pressurised containers.
· ***Information about storage in one common storage facility:*** Not required.
· ***Further information about storage conditions:***
Store in cool, dry conditions in well sealed containers.
Protect from heat and direct sunlight.
· ***7.3 Specific end use(s)*** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· ***8.1 Control parameters***
· ***Components with limit values that require monitoring at the workplace:***
WEL: workplace exposure limit

106-97-8 butane	
WEL (Great Britain)	Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

· ***DNELs***

64742-49-0 Naphtha (petroleum), hydrotreated light		
Dermal	DNEL (worker, long-term, systemic)	25.9 mg/kg bw/day (human)
Inhalative	DNEL (worker, long-term, systemic)	3.25 mg/m³ (human)

· ***Additional information:*** The lists that were valid during the compilation were used as basis.

· ***8.2 Exposure controls***
· ***Personal protective equipment***
· ***General protective and hygienic measures***
Keep away from foodstuffs, beverages and food.
Take off all contaminated clothing immediately.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
· ***Breathing equipment:***
Not necessary if room is well-ventilated.
Use a breathing protection if high concentrations are present.
Filter AX.
· ***Protection of hands:***

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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· ***Material of gloves***
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· ***Penetration time of glove material***
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· ***For the permanent contact gloves made of the following materials are suitable:***
Fluorocarbon rubber (Viton)
· ***For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:***
Nitrile rubber, NBR
· ***Eye protection:***

Tightly sealed safety glasses.

SECTION 9: Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties***	
· ***General Information***	
· ***Appearance:***	
Form:	Aerosol
Colour:	Whitish
· ***Odour:***	Characteristic
· ***Odour threshold:***	Not determined.
· ***pH-value:***	Not determined.
· ***Change in condition***	
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	-44 ℃
· ***Flash point:***	< 0 ℃
· ***Inflammability (solid, gaseous)***	Not applicable.
· ***Ignition temperature:***	328 ℃
· ***Decomposition temperature:***	Not determined.
· ***Self-inflammability:***	Product is not selfigniting.
· ***Explosive properties:***	Not determined.
· ***Critical values for explosion:***	
Lower:	0.7 Vol %
Upper:	10.9 Vol %
· ***Vapour pressure at 20 ℃:***	ca. 4200 hPa
· ***Density at 20 ℃***	0.74 g/cm³
· ***Relative density***	Not determined.
· ***Vapour density***	Not determined.
· ***Evaporation rate***	Not applicable.
· ***Solubility in / Miscibility with***	
Water:	Not miscible or difficult to mix

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· ***Viscosity:***	
dynamic:	Not determined.
kinematic:	Not determined.
· ***Solvent content:***	
Organic solvents:	~ 90 %
Solids content:	< 10 %
· ***9.2 Other information***	No further relevant information available.

SECTION 10: Stability and reactivity

· ***10.1 Reactivity*** No further relevant information available.
· ***10.2 Chemical stability***
· ***Thermal decomposition / conditions to be avoided:***
No decomposition if used according to specifications.
· ***10.3 Possibility of hazardous reactions*** No dangerous reactions known
· ***10.4 Conditions to avoid*** No further relevant information available.
· ***10.5 Incompatible materials:*** No further relevant information available.
· ***10.6 Hazardous decomposition products:***
None in case of intended use and storage in compliance with instructions.

SECTION 11: Toxicological information

· ***11.1 Information on toxicological effects***
· ***Acute toxicity*** Based on available data, the classification criteria are not met.

· ***LD/LC50 values that are relevant for classification:***		
64742-49-0 Naphtha (petroleum), hydrotreated light		
Oral	LD50	> 6,000 mg/kg (rat)
Dermal	LD50	> 3,000 mg/kg (rabbit)
Inhalative	LC50	> 32 mg/l/4h (rat)

· ***Primary irritant effect:***
· ***Skin corrosion/irritation***
Long-term skin contact may cause skin irritation and/or dermatitis.
Causes skin irritation.
· ***Serious eye damage/irritation*** Slightly irritant
· ***Respiratory or skin sensitisation*** Based on available data, the classification criteria are not met.

· ***Repeated dose toxicity***		
64742-49-0 Naphtha (petroleum), hydrotreated light		
Oral	NOAEL (90d)	100 mg/kg bw/day (rat) (OECD 408)

· ***CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)***
· ***Germ cell mutagenicity*** Based on available data, the classification criteria are not met.
· ***Carcinogenicity*** Based on available data, the classification criteria are not met.
· ***Reproductive toxicity*** Based on available data, the classification criteria are not met.
· ***STOT-single exposure***
May cause drowsiness or dizziness.
· ***STOT-repeated exposure*** Based on available data, the classification criteria are not met.
· ***Aspiration hazard***
May be fatal if swallowed and enters airways.

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SECTION 12: Ecological information

· ***12.1 Toxicity***

· ***Aquatic toxicity:***	
64742-49-0 Naphtha (petroleum), hydrotreated light	
EC50 (static)	4.5 mg/l/48h (Daphnia magna) (OECD 202)
EC50 (static)	3.7 mg/l/96h (Pseudokirchneriella subcapitata) (OECD 201)
LC50	8.2 mg/l/96h (Pimephales promelas) (EPA 66013-75-009)

· ***12.2 Persistence and degradability*** No further relevant information available.
· ***Other information:*** There are no data available about the preparation.
· ***Behaviour in environmental systems:***
· ***Components:***
A product that has flown out can lead to the formation of a film on the water surface which reduces the oxygen exchange and results in the organisms dying-off.
· ***12.3 Bioaccumulative potential*** No further relevant information available.
· ***12.4 Mobility in soil*** No further relevant information available.
· ***Additional ecological information:***
· ***General notes:***
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system.
Danger to drinking water if even small quantities leak into soil.
· ***12.5 Results of PBT and vPvB assessment***
· ***PBT:*** Not applicable.
· ***vPvB:*** Not applicable.
· ***12.6 Other adverse effects*** No further relevant information available.

SECTION 13: Disposal considerations

· ***13.1 Waste treatment methods***
· ***Recommendation***
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
The waste code numbers mentioned are recommendations based on the probable use of the product.

· ***European waste catalogue***	
14 00 00	WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08)
14 06 00	waste organic solvents, refrigerants and foam/aerosol propellants
14 06 02*	other halogenated solvents and solvent mixtures

· ***Uncleaned packagings:***
· ***Recommendation:***
Disposal must be made according to official regulations.
Non contaminated packagings can be used for recycling.

*

SECTION 14: Transport information

· ***14.1 UN-Number***	
· ***ADR, IMDG, IATA***	UN1950
· ***14.2 UN proper shipping name***	
· ***ADR***	1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS

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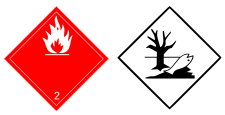
· **IMDG**	AEROSOLS, MARINE POLLUTANT
· **IATA**	AEROSOLS
· **14.3 Transport hazard class(es)**	
· **ADR**	
	
· **Class**	2 5F Gases.
· **Label**	2.1
· **IMDG**	
	
· **Class**	2 Gases.
· **Label**	2.1
· **IATA**	
	
· **Class**	2 Gases.
· **Label**	2.1
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	Yes Symbol (fish and tree)
· **Special marking (ADR):**	Symbol (fish and tree)
· **14.6 Special precautions for user**	Warning: Gases.
· **EMS Number:**	F-D,S-U
· **Stowage Code**	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· **Segregation Code**	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity

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· ***Transport category***	2
· ***Tunnel restriction code***	D
· ***IMDG***	
· ***Limited quantities (LQ)***	1L
· ***Excepted quantities (EQ)***	Code: E0 Not permitted as Excepted Quantity
· ***UN "Model Regulation":***	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

*
SECTION 15: Regulatory information

· ***15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture***

· ***Directive 2012/18/EU***
· ***Named dangerous substances - ANNEX I*** None of the ingredients is listed.
· ***Seveso category***
P3a FLAMMABLE AEROSOLS
E2 Hazardous to the Aquatic Environment
· ***Qualifying quantity (tonnes) for the application of lower-tier requirements*** 150 t
· ***Qualifying quantity (tonnes) for the application of upper-tier requirements*** 500 t
· ***REGULATION (EC) No 1907/2006 ANNEX XVII*** Conditions of restriction: 3

· ***National regulations***

· ***Water hazard class:*** Water hazard class 2 (Self-assessment): hazardous for water.
· ***Other regulations, limitations and prohibitive regulations***
Observe the "Technische Regel Druckgase" (TRG 300) during handling and storage.

· ***Substances of very high concern (SVHC) according to REACH, Article 57***
None of the ingredients is contained.

· ***15.2 Chemical safety assessment:*** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· ***Relevant phrases***
H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

· ***Department issuing data specification sheet:***
This Material Safety Data Sheet has been drawn up in cooperation with:
DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,
phone: (+49) 511 42079 - 0, reach@dekra.com.

· ***Abbreviations and acronyms:***
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas (Comp.): Gases under pressure – Compressed gas
Flam. Liq. 2: Flammable liquids – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· **** Data compared to the previous version altered.***